THE

MASSACHUSETTS TEACHER.

[J. W. DICKINSON, Editor for December.]

Vol. XXVII. DECEMBER, 1874.

No. 12.

PRIVATE AID TO THE HIGHER PUBLIC EDUCA-TION.

THE recent discussion of the higher public education has demonstrated, with unmistakable emphasis, that the primary and superior schools, in our American system, must stand or fall together. The pronounced enemies of the high and normal schools and the state university, are also the friends of the rugged school notion of primary education that the masses of the people should receive sufficient public instruction to fit them for their "position in life"; it being assumed that here, as abroad, the children of the laboring class will walk in the track of their fathers. This crusade, alike against a generous primary school training and the support of higher institutions of learning, by the State, is made either in the interest of a sectarianism which desires to monopolize the superior teaching of superior youth; or a social or learned aristocracy which yearns to hold on to its present eminence; or the ambition of a few great colleges to reach the position in American education occupied by Oxford and Cambridge in England; or a political reaction that thrives only upon the ignorance of the "common people." It is well that the discussion has come, and that the whole system of superior public instruction has been assailed by its ablest opponents. The verdict is practically recorded, and the people have decided to retain the present American system of schools; going on, in a wise spirit of progress, to complete the edifice rather than tear down the upper stories and roof in the basement.

But, now this is decided, a new difficulty appears, in respect to the adequate support of this class of schools. It is very easy for a village in Massachusetts or Ohio to vote to establish "a firstclass high school." It is a tolerably easy achievement to raise a local demand for a new normal school, and obtain from the Legislature a grant to place a school building on the ground. And, by persistent lobbying, even such establishments as artschools, museums, and technical seminaries of various sorts can be launched. The National Government has enabled every State to go into the enterprise of a State university; in some cases, to attempt a double-headed collegiate system of literary and industrial education. But all these schools are expensive. The cost of the higher education increases yearly, with the demand for increased breadth and thoroughness, and competent instruction. And already the strain has come, and the friends of our high, normal, and technical schools, and State universities everywhere, are anxiously looking about for the additional "sinews of war."

It is a significant fact that hardly a State normal school in the Union is now able to offer salaries competent to attract the leading educational ability of the country to its service. Several of them are under the supervision of admirable principals; but these men are serving the State at a constant sacrifice of personal interest, and are compelled, often, to crushing overwork, for lack of competent assistants. The difficulty in the high schools is even greater.

Few of our smaller towns are willing to be taxed to bring into the high school the corps of instructors absolutely essential to its success. The inferior work that these institutions are thus compelled to do, tells against them before the public, and is paraded by the private and sectarian corporations which are interested in the failure of the whole public system. And there have been warnings sufficient to remind the most ardent friends of the State universities that they are all at the mercy of a political partisanship which may put them on starvation rations on the slightest pretext.

We fear it is not easy to create the immediate public opinion necessary to secure the adequate public support to these higher institutions of learning, demanded by the spirit of a progressive education. Especially do schools of this sort need permanent endowments, with a steady income, to ensure them against the feverish state of agitation into which they are cast every year by their pecuniary necessities. The normal schools of New York are forced to a bitter warfare in the Legislature every winter by the efforts of a crowd of local and sectarian academies to divide the State funds for training teachers. The most famous of these schools, which sends its graduates to every State, and is the mother of the training school, is now officered by a devoted corps of superior teachers, who work on salaries disgracefully small, and their subordinate instructors are hardly paid more than the primary school mistress in our cities. This state of affairs cannot endure without driving from these posts of public higher instruction the majority of their first-rate officials, and calling to their places that class of greedy, pushing, superficial, and showy adventurers who besiege the lobbies of our boards of education, and well know the secret of "button-holing" the "fathers" of the State.

The relief in this dilemma must come, as it already is coming, in some quarters, from the supplementing of the public tax, by munificent private gifts of permanent endowment. What Cornell has done in New York, and McWicken in Ohio, and other large-minded friends of public education in other parts of the Union, must be far more extensively repeated, till a stream of private aid, sufficient to place all these institutions on a permanent basis, is secured.

There is no way in which the wealthy friends of education in Massachusetts could so effectually help our State system of schools as by the permanent endowment of our five normal schools. It is becoming more apparent every day, that we must rely on these schools for the training of our superior teachers; especially for the preparation of superior young women competent to handle the training schools, which so many of our large towns are opening for the instruction of primary teachers. A hundred thousand dollars, placed under each of these schools, as a permanent endowment, would inaugurate a new era in their

development. It would then be possible to attract to them the most famous instructors in departments now at the mercy of such talent as can be secured at a thousand a year. The large plans of their accomplished principals and wisest friends could then be developed, and our State become once more the leader in the new era of public education. No year passes when large sums of money are not bestowed by wealthy individuals, in the towns where these schools are located, upon sectarian colleges or private schools,—too often to bring into life a new establishment uncalled for, and only to be sustained by the incessant importunity of its interested friends. How much better could a portion of these funds be devoted to the normal schools which have already become the pride of Westfield, Salem, Framingham, Bridgewater, and to the new school at Worcester.

The same munificence will place our high schools on a foundation from which they cannot be moved by political, sectarian, or social estrangement. Our public libraries, which are a vital part of our American system of education, also need this underpinning. And few investments, in the present distracted state of our lecture system, would be of more permanent value than an ample endowment, attached to the high school of every city or village, 'or superior courses of free lectures, on topics of permanent interest to the public. The "Lecture Agency" has changed the original "Lyceum" of the American people to a grand public show, from which the wisest and most useful of our public lecturers are crowded away. At the same time, there never was such need of a higher class of public lectures, by superior men, as to-day. These agencies of the higher culture can thus be placed on foundations which will enable them to do in fact, what they now so seldom do except in name: bring a really free superior education to every locality, and tempt every youth of superior ability to develop his gift for the service of the state and the good of mankind.

We believe, if the influential friends of public education, while never relaxing their efforts to educate the whole people up to a willingness to be taxed more amply than now, would make this a prominent point in their appeals, a great stream of wealth might be turned in this direction. Certainly, the ambition of that class of rich men who wish to leave their name to some good establishment, might be most laudably gratified by giving the name to a department in a free high, normal, or technical school, a public library, or course of lectures, which would be a permanent benefit to all generations. Private gifts for education of the sectarian or private sort are so often swamped in obscurity that they seldom redound to the credit of the giver. America is full of little, obstinate boards of trustees, watching jealously some educational fund, totally inadequate to secure the object of its giver; only kept before the public by a constant diversion of interest from public education.

The fear that such gifts will be wasted by the local governments of cities, or the legislatures of States, perhaps deters many from making them. But we believe that instances of such misappropriation are rare, compared with the petty and wasteful use too often made of the endowments for private colleges and schools. There is no guardian of educational funds more reliable than an intelligent people, and to such guardianship may our men of wealth with confidence intrust the means of bringing the advantages of a truly superior education to every American child who has the ability and ambition for the work it demands.

A. D. Mayo.

TEXT-BOOKS.

SHALL we teach our pupils by presenting to them objects of thoughts, or by presenting the signs of these objects?

1st. What is teaching?

That we may answer this question, two terms must be illustrated and defined. The terms are *cause* and *occasion*. If an object as a mineral is brought into the presence of the mind, the mind will think of the object. That is, the mind will produce a mental state called thinking. That which produces anything is called the *cause* of that thing.

Thinking, or that which is produced by the cause, is called an effect. The mind cannot think unless it has in its presence, by presentation or by representation, some object of thought. The presence, then, to the mind, of some object of thought is necessary that the cause "that is the mind" may produce an effect, that is, thinking. The presence of the object may be

called a condition necessary that the cause may produce an effect. The condition necessary that a cause may produce an effect may be called an *occasion*.

The mind itself is always the cause of its own activity.

The occasions of its activity are objects of thought brought into its presence.

Presenting occasions to the mind for mental activity is teaching.

It is the duty of the teacher to prepare proper occasions of thought for his pupils, and to bring these occasions in a right manner into the presence of their minds.

By occasion, or object of thought, is meant anything of which the mind may think.

Teaching should excite mental activity; but as mental activity produces knowledge, knowledge in turn excites activity, so teaching should have for its object activity and knowledge.

What are the proper occasions for the teacher to present to his pupil, that the pupil's mind may be led to think so as to acquire knowledge? An answer to this question is found in a knowledge of the human mind, or of the laws that determine the way in which the mind acts.

I wish my pupil to know of the form of an orange. He has never had an idea of such a form awakened in his mind. The only possible way by which he can become conscious of this particular form for the first time, is by having an object possessing this form brought into his presence.

What is true of the form of the orange is true of every object of which the mind may desire to think.

Subjects of thought, or those objects of thought found only in the mind, must be taught by the same method used in teaching external objects.

I wish my pupil to study the activity of the will. As the activity of the will is in the mind, it may be called a subject of thought.

The pupil can never learn of the activity of the will unless he is made conscious of the activity of his own will. On this account I should commence to teach the phenomena of willing, by leading the pupil to exert his own power of willing, and then to turn his attention to his own state of mind as the subject of his thoughts. Unless I teach in this way my teaching is in vain.

There can be but two occasions for knowledge.

1st. The presence to the mind of the objects and subjects of knowledge. 2d. The presence of the signs of that knowledge.

But signs can never be signs even until the thing signified is known.

Text-books are books in which the principles of a science are attempted to be unfolded. Reading-books, spelling-books, books of problems, books containing language to be translated and analyzed, are not text-books. Text-books proper can contain nothing but the signs of knowledge. Therefore the ability to use a text-book at all, presupposes that the knowledge described in the book has already been learned.

Words, then, can never be original sources of knowledge; but they may be so constructed that they will describe, in a logical order, the knowledge we already possess and so enable the mind to return to the object and to discover relations that would not otherwise be found. Language may also direct us where to look for the facts we desire to know.

By an actual observation of many mountains, and by a generalization of the qualities we find common to those we observe, we may form the general notion we call mountain.

A book may inform us now that there are mountains in Switzerland. We may then go to Switzerland and find objects possessing those common qualities that we have before known, and named mountain, but we shall find more than mountain, we shall find the Alps, which, as individual objects, we never before knew, and which we could never know until we should see them with our own eyes. In this case the book suggested to us the place where our objects of study might be found. On account of the facts that books can suggest to us a proper arrangement of our knowledge already acquired, and also where objects of study may be found, books may be used for reference.

But because language, from the nature of the case, can never be the original source of knowledge, there should never be any text-books; that is, books designed to take the place of objects and subjects of thought. The teacher must always bring these before the minds of his pupils by an actual presentation of them. At this point one may object by saying that some objects we teach cannot be brought into the presence of the pupils. The Alps are in a foreign land. Our pupils may never be able to go to them, and the mountains can never be brought to the pupils. In such a case the pupils can never know the Alps. We may teach a height that is equal to their height, a direction and extent equal to their direction and extent; but these qualities will be combined into an imaginary mountain that has nothing in nature corresponding to it. This is the character of all that knowledge of things which we have not had brought into the presence of our senses.

In such cases we may be said to know of things, but we cannot be said to know the things themselves.

We know of things when we learn by illustrations.

It may be well to know of things, which in themselves we can never know; but we must remember that we cannot even know of things, unless objects having the qualities we study are presented to us. Language in this case, also, cannot be the first occasion of knowledge; illustrations may be the occasions of a knowledge of qualities and relations; they cannot be the occasions of a knowledge of the things themselves.

If we confine our pupils to text-books during the time of early school life, we shall shut them away from a contact with objects of thought. They will, under such teaching, acquire a habit of dealing with words only; of *things* they will know little and care little.

They will not know the intellectual joy that springs up in the mind of one that perceives, through his own senses, the effects about him, and by the activity of his own powers is able to find the cause of the effects.

The use of books to the exclusion of things stupefies the mind, and leads the pupil to pass through the world and never see it.

One trained by text-books may become a fluent speaker, but he will be likely to become a superficial thinker. His words cannot mean much to himself, whatever signification they may have to others. Students that are shut up to text-books, seldom have any enthusiasm in study. They pass through the schools as a formal thing, then go out into life, and begin by the study of things themselves, to learn how to prepare for the duties of life.

How little those of us who were brought up on text-books do know! To test our knowledge, ask us to describe a leaf of one of

the most familiar of our trees, or the difference between a berry and a fruit; ask us to show the difference between a plant and an animal; what is meant by the *word* tree or book, or knowledge or belief, or opinion, or education, or right, or law.

Ask us for the difference between elementary knowledge and scientific knowledge; or the difference between a text-book and any other book. Ask us to explain a method of thinking by an illustration of the method. Watch us to see if we do not enter sometimes without hesitation upon the discussion of questions concerning which we evidently know little, and we shall be found rich enough in words and poor enough in ideas.

This need not be so. Let us no longer, in our study and in our teaching, violate a law of the human mind by using signs before the thing signified is known. Let us not permit our pupils to use names before we have led them to be conscious of ideas. Let us teach by that method which will permit the pupil to invent his own thoughts. Let us remember that the mind is trained to self-government only by its own activity; that words are powerful things when they represent ideas, but nothing, disconnected from them.

If the teacher understands the laws of the human mind, he will teach so that his pupils will have knowledge and culture.

It is grand work for a teacher to provide himself with the right means of teaching, and then to stand up before his class, and lead their minds to work out for themselves their own knowledge, and in such a way that strength as well as knowledge will be the result.

He will know that as the mind becomes conscious of its first ideas of objects by a study of them, so it is possible to express these ideas to another mind in words, only as both have already known the same objects, and as both are able to use, in the same sense, the words employed to express this common knowledge. Hamilton says, that words, as languages are constituted, are nothing more than hints, to put us to the study of things; that it is the office of language not so much to pour knowledge from one mind into another as to bring two minds into the same train of thinking, and to confine them to the same track.

The present use of text-books in this country, and the whole system of lecturing in the schools, as furnishing original sources

of knowledge, are fallacies that have already wrought mischief enough.

The reform we need is, that which will be brought into existence by leading the pupils of the schools back of signs or words to things signified for their knowledge, and by such a leading as will permit the student to find knowledge for himself.

We must make all possible haste to change the results of a school life, from the acquisition of a small number of expressions of disconnected facts, to the acquisition of a method of study that will send the pupil from the school into the world prepared to acquire knowledge and to use it.

There is not a good teacher in the country whose best teaching is not given without the text-book.

When we have a method of teaching in our schools that will occasion such elementary knowledge as will render scientific knowledge possible; when our teachers teach, and our pupils learn, in accordance with the philosophy of things, and of the human mind; then the efficiency of our schools will be increased a hundred fold; or, rather, a higher efficienc, will begin to exist. That time is coming, for teachers are now everywhere studying their work; and as they study carefully, they find a higher end to attain than can be attained by committing to memory descriptions of the ideas other minds have invented. They find that there is a mode of teaching which will lead the mind of the pupil to unfold itself; which will train the mind to know things and to investigate all its subjects of thought in accordance with a method that will prepare the mind for the life it is to live.

"TEACH BUT ONE THING AT A TIME."

No maxim is oftener repeated than the aphorism above. What does it mean?

Teaching consists in presenting to the mind objects and subjects of thought as the occasions for its activity. By exercise the mind comes to act with facility, and to have an inclination to act in certain ways; habits are thus formed, and character results in accordance with the kind of activity. This is what teaching is, its method, and its end.

Now, all right activity is in accordance with certain fixed laws of association, by which thoughts of one thing excite thoughts of some other thing. The name of a thing naturally excites thoughts of the thing itself; so the thought of the thing naturally excites the thought of the name. The date of an event naturally excites thoughts of the event; and the thoughts of the event naturally excite thoughts of the place, and of the participators in the event. The thought of an effect naturally excites thoughts of the cause. It is thus that the knowledge of a cause and the knowledge of its effect can be taught at once, and in less time than either can be taught separately.

The imagination depends for its materials and for its activity upon the sense of sight. We must, then, teach the pupil to see, if we would cultivate his imagination; the one thing must be done for the sake of, and at the same time with, the other. The emotions are cultivated by sounds, hence the emotional nature may be trained by singing and speaking; but the ear, and the voice with its many organs, are at once in exercise with the simplest vocalization.

What, then, can be the meaning of this aphorism? It can mean no more than that subjects of study shall have a distinct presentation. Thus, what belongs to grammar shall be kept wholly distinct from orthoëpy and orthography, from logic and rhetoric; also, that a logical order shall be observed in the teaching of topics, and that they shall not be presented in such rapid succession as to be huddled one upon another in the mind.

A misapprehension of this aphorism is seen in the attempt to teach words without ideas, expressions without thoughts, and generally to divorce signs and the things signified. Hundreds of illustrations crowd upon the mind from the arbitrary teaching of the alphabet of our own, and the unmeaning forms of a foreign, language, living or dead, to the senseless forms of the logical syllogism. A result of this misapprehension is, that the time of the child is frittered away in committing to memory disassociated facts, and forms of expression which have no basis in facts, which is not simply a useless appropriation of time, but a wicked abuse of a sacred trust. Another result is that where fine

grading is an absurdity, as in the majority of district schools, a single individual often constitutes a class, and is conducted on the class plan.

Now, since things are necessarily associated in the mind, the teacher needs to know the laws of association, and, knowing them, he should avail himself of his knowledge to teach together, and by natural methods, things which have a natural dependence; and since time is a most important factor in the education of a child, he should tax his ingenuity in devising means for teaching as many things as possible at the same time, always having regard, of course, to the logical order of presentation above referred to.

Thus, in teaching the young child to read, while the principal aim should be to secure the expression of the thoughts and feelings of the author, the method should be such that the elementary sounds and the letters of the language, and, with these, the elements of orthoëpy and orthography, should be acquired incidentally; the method should also secure to the pupils a plan for elementary composition, whilst the matter should embrace the elements of botany, mineralogy, zoölogy, and much elementary knowledge of many things, as of colors, geometric forms, etc.; and, in aid of all these exercises, the child should be forming his handwriting.

In teaching arithmetic, the distinction between mental and written arithmetic should vanish; what is ordinarily pursued orally, should often be expressed in written characters, and much of written arithmetic should be expressed orally. Under the general term of combining numbers, the young pupil would learn at once to add, subtract, multiply, and divide simple numbers; this he would do in less time, in fact, than he now learns one of these operations separately.

With geography, too, should be taught drawing, or rather geography should be taught with drawing: the details should be made to hold their natural relations; latitude and longitude should be taught with the outlines of the continents, — the water-courses with the mountains, the commercial towns with the configuration of the coast, the navigation of rivers, and the railroad routes. History should be taught with geography, peoples and their occupations with climate, soil, and productions.

This method is not wholly inapplicable to the higher grade of work; for botany and geology have mutual dependences; psychology and logic restate and enforce some of the principles of rhetoric; however definite the outlines of the sciences, all are interdependent. But to no one is the true import of the above aphorism more important than to the teacher of the district or ungraded school.

G. A. W.

CLASSIFICATION AND COURSE OF STUDY FOR UNGRADED SCHOOLS.

An ungraded school is not necessarily one in which the pupils have not been classified according to their mental strength for study, and according to their knowledge, but one in which several grades are found together in one school-room, under the control of one teacher.

A school must be classified, however mixed it may be. Suppose the proper classification to be made in the mixed school, each grade should have the same course of study it would have if it were taught by itself in a separate school.

The classification and course of study in an ungraded school should be the same for each division of that school as they would be if that division were by itself under its own teacher.

The teacher of the ungraded school should aim to accomplish what the teacher of the graded school accomplishes, in so far as he has the time and the power.

We may then classify the pupils in an ungraded school, and make out courses of study for the classes as though each grade were to be taught by itself in a separate school.

The classification of our so-called ungraded schools may be into primary, intermediate, and grammar divisions.

All young pupils whose powers of observation only are especially active, and who are learning their first elementary knowledge, should be collected into the *primary* division. The powers of observation are those powers by whose activity the mind is furnished with sensations and perceptions. The course of study, then, for the primary school should furnish correct occasions for

the activity of these powers, and, therefore, should consist of the following topics: Reading, which implies a consciousness of the ideas and thoughts expressed by the words and construction of words, constituting the reading lesson; Alphabet and Spelling, that the pupils may make words for themselves; Elementary Composition, that ideas and thoughts which have been invented and combined may be expressed with propriety and facility; Number, that quantity may be studied and expressed; Linear Drawing, that the young pupils may be trained to see things as they are, and be furnished with additional means of describing what they see; Singing, for vocal culture and for the training of the emotional nature; and Gymnastics, for the health and grace of the body.

Lessons given upon the topics I have enumerated may all, with one exception, be called lessons in language; for learning language implies learning that which is named and described by language, as well as learning the description itself. From these lessons in language there will arise the first series of lessons on objects to be taught in the primary school; and from the lessons themselves, the teacher may learn what objects and what qualities of objects he is to teach, and the order of teaching them.

Whatever is named and described in the language lessons, is to be taught objectively, before names and descriptions are taught.

This objective teaching, arising from the primary course of study, is a part of the course itself, and has its immediate end in this course.

But in addition to all this, the primary teacher must look forward into the intermediate school, to know what preparation his primary pupil will need, that he may enter upon an intermediate course of study.

In the intermediate school, the pupil will be required to distinguish objects from one another by means of their qualities. This analysis of objects of study for their distinguishing qualities will prepare the student for future scientific study. Before one can know the qualities of objects, he must know the qualities themselves. The qualities must be taught objectively in the primary school.

A systematic course of objective lessons on the qualities of matter will constitute the second series in the primary school. The qualities to be taught and the order of teaching, are color, form, size, weight, place, and at last, the secondary qualities, as hardness, brittleness, etc.

After the primary course of study has been thoroughly applied, the young student can enter the intermediate school, prepared by the discipline of his powers of observation, and by his elementary knowledge, to take an advanced step in reading, spelling, elementary composition, and number, and in all other exercises commenced in the primary school. Facts that are to furnish the occasions for a knowledge of history and geography, may also be taught. The great work of the intermediate schools is to lay a foundation for the sciences. The powers of mind to be especially cultivated, are the powers by which we have sensations and perceptions, or the presentative powers, called also powers of observation; also the representative powers, memory and imagination. The occasions for calling all these powers into activity are reading, spelling, elementary composition, writing, number, facts of history, elements of geography, special lessons in language, singing for the emotional nature exercises for the health of the body. These topics should be taught orally and The teacher of the intermediate school should teach the topics that are peculiar to his own school, and, besides these, he must begin to prepare his pupil for scientific study. Science is a knowledge of plans of structure, or a knowledge of a plan in accordance with which facts exist. A knowledge of plans of structure, or scientific knowledge, is occasioned only by a knowledge of structures themselves. The pupils in the intermediate school, in addition to the study of the topics that have more immediate reference to this school, should be put to a systematic study of objects for facts concerning the structure of these objects.

This will give rise to a third series of object lessons, that have for their purpose a knowledge of those facts concerning the structure of objects, by means of which the objects are distinguished from one another, and by which, in the future, they will be classified.

In this series of object lessons the student will apply the

knowledge he has gained in the primary school, in his study of qualities, to the study of objects for their qualities.

The teacher is guided in this intermediate object teaching by a knowledge of the sciences, and by his knowledge of the true occasions of scientific truth.

The order of classification in the sciences that pertain to natural objects is, into branches, classes, orders, families, genera, and species. These divisions are made on account of the similarities and differences in the qualities of objects.

Object lessons, preparatory to the study of the natural sciences, should be given in such a manner that the pupil will learn the marks by which classifications are to be made and in the order in which these marks will be employed in the sciences themselves.

In the intermediate schools the foundation for scientific study is to be made.

When the pupil has passed well over his preparatory study for elementary knowledge, and his mind is trained to study, and is well stored with a knowledge of facts; when he begins to inquire for the causes of things, and can understand the answers given to his inquiries, then he may enter upon his scientific study, in what should be called the grammar school.

In addition to the presentative and representative powers, the reflective powers are now to be especially trained.

These powers are generalization and reasoning.

In the course of studies to be used as occasions for the activity of the reflective powers, number leads to arithmetic, arithmetic to algebra, form to geometry, the study of animals, plants, and minerals to zoölogy, botany, and mineralogy.

From the study of those changes that may be observed in bodies and among them, the mind may be led to the study of chemistry, natural philosophy, and astronomy. The pupil may

now be introduced to geology and geography.

The study of physiology is implied in the study of plants and animals. From the study of objects, and from the use of language, the mind will be led back of these things, to the study of the structure of language, by which thoughts of objects are expressed, and the study of grammar may be introduced. From the study of the structure of language the mind is led to the

study of its use, and rhetoric, English literature, and advanced composition writing are taken up.

From the study of language, that expresses thought, the mind is naturally led to the study of the laws of thought itself, under the topic logic. From the thoughts the mind has, it is led to the study of itself, and it gains a knowledge of psychology. Now the higher mathematics may be introduced, and also the philosophy of history.

The mind will now naturally turn its attention to the relations man holds to man in society, and to the relations men hold to God, — so that civil polity and moral philosophy should be taught. Thus by regular steps the mind of the pupil is led from the study of things, to the study of God who made all things.

The wants of the developing mind should be the object the teacher must study to supply, as he makes out his plan of studies and determines his modes of teaching.

Elementary knowledge should always be made the occasion of scientific knowledge; and the different topics in the course of study should follow one another in that order which will enable the pupil to think so that his thoughts may be related to one another by the law of dependence.

It should be the aim of the teacher to teach his pupil a plan of study, rather than to teach him many facts or much science; to train his mind to think and to behave properly, rather than to attempt to lead it to acquire much knowledge, or to permit it to work without method.

The schools should have a thorough grading, and definite courses of study, — courses made out in accordance with some principle, and then the courses should be applied in a right manner.

A wise authority over the schools will first turn its attention to courses of study; secondly, to classification of the students to be taught; and thirdly to the qualifications of the teachers who are to apply these courses. Or, rather, the authority will turn its attention to all these things at once; for the existence of any one of these conditions is of not much account without the other two.

Our schools now need thorough organization, such as can be established by men of thorough culture, who, enlarged by their culture, can rise above all prejudice and the effects of mere habit, and can follow the guide found in the results of their own thinking. The schools must be supplied with the means of teaching. Apparatus, objects of study, and all the means of elementary study must be supplied in abundance; and then the teachers of the different grades of the lower schools must be permitted to teach with more reference to the wants of their pupils, and with less to the questions that will be put to them on their examination for a higher grade of study.

Our teaching, it seems to me, ought to mean more. It ought to have a more definite end to secure. In this country our schools are not equal to those of other countries, in organization and in means for work.

Our teaching is more mechanical, and we pay more attention to the forms than to the philosophy of teaching. Some are even opposed to method in our work. But these things are passing away, and both teachers and the great public are changing their minds in regard to what good teaching is.

A child in our lower schools ought to prepare himself for the scientific study pursued in the upper schools. This preparation consists in cultivating his powers of observation, and in acquiring a knowledge of facts. The facts can never be learned except right occasions are presented to his mind.

Right occasions are not words in the school-books, but the things themselves that constitute the facts. Whatever we desire our pupils to be or to do, they must be trained to be and to do by being and doing.

If the pupil in the lower schools has a right training, he will have the means for scientific study, and a method of study in accordance with which the means should be used; and he will have mental discipline that will enable him to make a full application of his method.

HOW TO GIVE ELEMENTARY LESSONS IN ZOOLOGY.

I WILL suppose that the primary pupil has been led to observe, 1st. The marks, that in the future he will use in classifying natural and artificial things.

2d. The marks in natural objects by which they may be divided into organized and unorganized things.

3d. The marks by which organized things may be divided, in the future, into plants and animals.

In the supposed third step taken, the pupil has been taught the marks by which he may be able to distinguish between organized bodies that are plants, and organized bodies that are animals. A knowledge of these distinctive animal and plant marks will enable the pupil to make an elementary classification of organized objects. Permit him, therefore, to separate the animals from a promiscuous assortment of organized things which are in his presence. Set aside the plants and place before him a bird, a lobster, a starfish, and a clam, - representatives of the four types of animal life. Teach the pupil the marks by which the four branches of animals may be known from one another. Better not give the names, - vertebrate, articulate, mollusk, and radiate to the animals. Class names are names of abstract qualities found common to a few individuals and extended to all of the same kind. If the pupil uses these class names in his elementary work they may have no definite meaning to him when he comes to use them in his scientific work. A vertebrate animal is an animal having either a bony or cartilaginous axis, above the main part of which there is a cavity containing the nervous system, and below the main part a cavity containing the organs of circulation, respiration, digestion, and reproduction; but the word vertebrate names a plan of structure which exists only in the mind. An indiscriminate use of class names, then, would prove fatal to the pupil in his future study. In elementary teaching it is not necessary to give names to the branches of animals at all; but if for convenience you prefer to speak of them by name, you may call them respectively backboned, ringed, wheeled, and soft-bodied animals. Have the pupil make an elementary classification of the four kinds of animals representing four plans of structure, the marks of which you have taught. All animals having a backbone, let the pupil place by themselves; those made up of joints, segments, or ring-shaped portions which are movable upon each other, by themselves. And so the wheeled and soft-bodied animals respectively by themselves. Have the pupils name the different animals that they have seen, and tell to which division each one belongs, by having previously stated that the animal has a backbone, is composed of a succession of ring-shaped parts having a hinge motion; has its parts arranged around a vertical axis; has a soft body, as the case may be. The more permanent marks of an articulate animal are the peculiar positions of the circulatory and nervous systems in reference to the position of the digestive system. An articulate animal is more surely distinguished by having its circulatory system immediately beneath the upper surface, the digestive system below the cirulatory, and the nervous beneath the digestive and lying close to the under surface. The position of the nervous and circulatory systems of articulate animals, is just the reverse of the position these systems occupy in the vertebrate animals. In teaching the marks of an articulate animal, it would be better to lead the pupil to see the position of the heart, the stomach, and the nerve centres, - the permanent and distinguishing marks of the animal.

Following the method already suggested to you, place on one side all the animals excepting those which represent the vertebrate plan of structure; and put before the pupil a cat, a bird, a fish, and a turtle, - representatives of the four classes of backboned animals. Lead the pupil to see that these animals are all backboned animals. Show to him the backbone of a turtle. Teach him the marks by which these animals are distinguishable from one another. In teaching that the bird and cat are warm-blooded animals, and the fish and turtle are cold-blooded, have the pupil, for himself, feel of the live animals. It may be questioned whether this teaching is sufficient, as it is not safe to infer that an animal feeling warm or cold to the touch is, therefore, a warm or cold blooded animal. The fish may have been immersed in warm water, and the temperature of the pupil's blood may be unusually low. The animal then to the pupil's touch would feel warm; but these conditions, in both the fish and the pupil, are abnormal. I do not think it in place at this period to have the pupil define warm-blooded and cold-blooded animals. He is acquiring a knowledge of facts; and facts only should be taught. In teaching that a turtle breathes through lungs, show and inflate the lungs of a dissected turtle.

While the distinguishing marks of these animals are being taught, several pupils may be at the blackboard making a record 1874.]

of what is taught. Have them write the words, Marks of a bird, and, either under it or against it, — Warm blooded, breathes through lungs, lays eggs. In like manner, have them record the marks of a cat, a fish, and a turtle, as the work progresses.

Dwell at length upon the application of everything taught. Let the lessons given be short ones. Have the pupils, at the close of each lesson, make an elementary classification of the objects, the marks of which you have just taught. Do not introduce into your teaching anything that does not hold an intimate relation to the qualities or marks of the things you are teaching. Teach the distinguishing marks and nothing more.

In the same way and in the right order, you should teach the primary and intermediate pupil all the facts that are necessary for a scientific student to use in classifying his objects of study from their classes, orders, etc., down to the most particular classification, or into their species.

Let us examine the elementary work in zoölogy that we advocate.

We began with the most general things; and in teaching these, we obeyed the law of the mind in acquiring more general knowledge first. We taught the marks and the elementary classification of

ıst.	Body.	Matural.
		Artificial.
2d.	Natural Body.	Organized.
		Unorganized.
3d.	Organized Body.	Animal.
		Plant.
4th.	Animal Body.	(Vertebrate.
		Articulate.
		Mollusk.
		Radiate.
5th.	Vertebrate Animal.	(Mammal.
		Bird.
		Reptile.
		Fish.

We taught facts only; and a knowledge of facts is elementary knowledge. Our teaching, then, is purely elementary. And as such we claim that it will lead the pupil to a preparation for scientific study. Observe that our method of teaching the qualities of objects is not a miscellaneous way, which method, though in itself is good, so far as it awakens interest in observing, and furnishes a significant language, yet it fails to teach a method of observing; and is not a preparatory step to the sciences. The method we employ is not aimless; it awakens an interest in observing, it furnishes a significant language; and it does more, —it leads the pupil to see, by observing objects of the same kind, that some objects have qualities in common. This knowledge will, in the future, occasion a knowledge of a plan in accordance with which facts exist. A knowledge of plans of structure is scientific knowledge. The elementary lessons we give in zoölogy, in accordance with our method, will be the occasion of a knowledge of the science of zoölogy.

Therefore our mothod of teaching elementary zoölogy possesses two features which we commend for your consideration:—

First, it furnishes for the pupil general knowledge first. This way of acquiring knowledge is in obedience to a law of the mind.

Second, in addition to doing all for the pupil that miscellaneous object teaching does, it gives him that knowledge which is elementary to, and the occasion of, a knowledge of scientific zoölogy.

MIDDLETON SMITH.

VERMONT DEPARTMENT.

H. T. FULLER, EDITOR.

THE endeavor to overturn the system of educational supervision in Vermont has proved successful. The Legislature in session at Montpelier voted, November 18, to abolish the Board of Education, and substitute in its stead a State Superintendent of Instruction, whose duties are essentially those of both the outgoing board and its secretary. Several causes have conspired to produce this result: First, a grudge of four years' standing against the board because it elected as secretary, in place of Mr. Adams, a non-resident of the State; Secondly, a desire to reduce the expense of general supervision; Thirdly, the wide-spread dissatisfaction with the action of the board concerning the recent change of text-books; and, Fourthly, the unpopularity of the reforms initiated or suggested by the board and its secretary, touching especially the introduction of the town system instead of the district system of schools, and of a method of supervision by counties, instead of by towns as at present existing. Other minor influences have concurred. The reform suggestions contained in the last report of the board and its secretary, the request of the latter for a clerk, and the fact that Dr. French had given considerable time to labor in another State, no doubt broke the camel's back. Yet the chief lever operated with, has been the change in text-books and the expense it entailed. The agents of one or two publishing firms whose books were thrown out, have for two years been ceaseless and untiring in their exertions against the board, and unrelenting in their hostility to its executive officer, whose good fortune (or misfortune) it was to have been the author of the arithmetics recommended for use in the State during the five years beginning November, 1873.

Our own experience and observation of differing systems of educational supervision in several States east and west incline us very strongly to prefer a system that eliminates such supervision from the arena of popular politics. is more progressive: it is productive of more permanent results. Under such a system, Horace Mann accomplished so much for popular education; and in the same way, Massachusetts not only maintains her leading educational position, but

makes experiments and tests methods of which, when success follows, other States reap large benefits.

It is eminently to be regretted that the people of Vermont evince so little disposition to encourage either the adoption of the wise and thoroughly tested reforms of other States, or the additional expenditure of money needed to make any educational force or system most efficient. We had hoped to record larger appropriations for the support of at least one of our normal schools, but in this we are disappointed.

It is, however, a matter of congratulation that the Legislature has acted so wisely in the selection of a Superintendent of Instruction under the new law.

The incumbent, Principal Edward Conant, of the Randolph Normal School, brings to the performance of his new duties, large and successful experience as a teacher; extensive acquaintance with the educational interests of the State, unflagging energy, and an honest purpose. We shall be much mistaken if there is no advance under his leadership.

THE MARKING SYSTEM.

This world is a hard place for shirks. Those deluded people who are spending ingenuity and energy in organizing their burdens on other people's shoulders, will not believe such an aphorism any more than they will believe that the shirks are the ones who make the world hard for others.

It behooves the teacher to do what he can to diminish this race of cumberers upon the face of the earth by all lawful means. The question is, "What that is lawful is at the same time most effectual." In few minds is there more than a half assent to the voice, strong in its very feebleness, which has said,—

"Get work! get work!

Be sure 't is better than what you work to get."

Good human nature, and above all child nature, needs something more as an inducement to exertion than the assurance that idleness is a synonym of discontent, or that God's curse of labor has become ur greatest blessing.

A real, near, tangible return for energy exerted, is what impels every average man and woman, boy and girl, to continuous effort. A walk taken on the abstract principle that exercise is good, is half a failure;

a walk taken for some trivial errand insensibly accomplishes the higher object of healthful exercise; study for the one grand, culminating purpose that they may become learned, is too high, — children cannot attain unto it; study that they may have a clear understanding of the topic to be met under discussion in the class-room brings sure and satisfactory results. And the knowledge that a record is kept of such results, that failure not only has a distant and doubtful effect in modifying their characters, but also is surely in the balance already against them, magnifies to due proportions the work nearest at hand. There is a realism about the little black figures on the white ground, and a permanence in them. By their fixed, obstinate adherence to facts, they help to banish the delusion that the stolen sweets of idleness can be paid for by spasms of excessive work. They are the fair, smooth stones that mark the way, or the stained and broken ones. Each stands for itself, and no after brilliant stroke can polish it.

So great is the love for the *dolce far niente* that it takes more than words to counteract it, — arguments that convince without converting.

Ambition and fear are the two forces oftenest used, and with best effect. It is when applied so as to intensify the love of study, and study from a keen desire to peer into the mysteries, that they are most satisfactory. Fear, as a motive, has for the most part been banished from the school-room since a better civilization has grown up among us. The inventive minds that were formerly exercised in adding to the petty scheme of torture that was once in vogue, may now devise new and interesting methods to vary the daily drudgery. And in choosing the site of a school-house in these days, no one gravely considers whether a branch with stout and flexible twigs grows conveniently near. But ambition holds its place as one of the ruling powers. As a force, it has all the while been present. The marking system but regulates it, - directs it so that it shall bear towards intellectual development. Before, it may have led the same amount of vital energy to be spent in those trials of skill and strength in which the hand and not the brain has a goodly share of training. Laudable practices, but if allowed to supersede mental gymnastics, we find that they make the representative Jack of our early classics a dull boy. Or the ambition inherent in every mind may be bent towards disciplining the teacher by trying his patience. Precedence in mischief sometimes gives distinction in schools, and in larger communities. This same half-wasted ambition may be made to promote industry, keenness of insight, mental and moral strength. Colleges and universities have found it expedient to use competition to promote these ends, and it is becoming more and more prevalent in lower grades of schools. But some who use it do so under protest while waiting for the better time, the purest intellectual light. They assume that it is not the highest motive to study for marks. I grant it. It is nobler to study from love of wisdom and a burning desire to prove all things; but if that love and that desire were all that moved the average student, it would bring tears to the eyes of the laughing Philosopher himself, to see how often he yielded to the little negligence that spoils, and how seldom used the great industry that saves. Other springs of action have been given him, — call them selfish if you will, — an honest pride in making the most of his one poor little talent, rather than leave it to rust in a napkin; a gladness in the approval of friends, of teachers, of fellow-students and, if marks record his right to a measure of satisfaction with the labors of the day, a gladness in them.

It has been objected that they narrow the mind by giving satisfaction if only the questions that come up in class are answered. But the concentration gained by this narrowing process is the very object of school discipline. When the flitting, fluttering Will o' the Wisp thoughts have been fairly caught and are firmly held to one subject, the work The exact knowledge gained by learning a few questions well, is of incalculably more value than an indefinite, comprehensive view and certainty in regard to nothing. Marks inculcate the necessity of expressing well what has been studied. One who can tell what he knows of a subject has a double knowledge, — a knowledge for him self and for others. He is more accurate and self-possessed than he would have been, had he studied merely that he might understand, and not that he might also explain. A class-room readiness is not a sign of superficial, but rather of well-digested information. Even general knowledge can be gained more readily by one who has learned to listen and assimilate, and all of whose faculties have been trained to be on the alert.

But if, by methods requiring exactness, by the spur of records and reports, the intellect is thus developed, is the moral nature dwarfed? Selfishness and deception are supposed to run rampart, but a well-regulated system is cause of this, as Tenterden Steeple was cause of Goodwin Sands. Nowhere is deception a more sorry ally. Straightforward conduct merely as policy is at a premium. So if principle depend upon a habit of uprightness, it is in favor of emulation that the scales should tip. If the scholars were, as a rule, allowed to report for themselves, if the papers of written recitations were not examined, and affairs were conducted in a slipshod way generally, the result would be painfully demoralizing; but we are speaking of a carefully

conducted system, where the slightest approach to dishonesty defeats the very ends it sought to gain.

The man out in the great school of the world, who, by patient persistence wins there the highest places, is he supposed to be cultivating selfishness? He fairly does his best; but the course lies open to every neighbor, and the race can stimulate him without casting the shadow of a wish that another shall be caught tripping. He may honestly rejoice in the success of one who is more highly gifted or has used more assiduous application than himself. It is in the very nature of things, in the constitution of society, that there must be competition, that each one may find the place he is best gifted for, in order that no round pegs roll loosely about in square holes.

Great government reforms are based upon this principle. Our religion, speaking in the practical words of Paul, recognizes it.

In classes where no leaders are allowed there is no occasion for the reproach of selfishness, since one does not gain by another's loss; but a word may be said in favor of perpetuating those time-honored institutions, class-leaders, even in some separate studies of our schools. For often it is not the urging of the teachers but the zeal of the leaders that makes the class advance, not a pushing but a drawing force that moves the wheels. The positions taken by the scholars are but relative, and the desire of each one to lessen the distance between himself and the one next above him is a constant factor. One single, thorough, determined worker in a class is a continual reminder and impetus, proving possibilities to the discouraged, and standing as a mute reproach to the indolent.

Here a danger creeps in. It is, that some ambitious and over-zealous pupils who need to put on the brakes rather than to use more steam, should suffer from the high pressure system. But the same argument might be used against employing energetic, live, inspiring teachers, lest they should overwork some under their influence. All the way up to manhood and womanhood, and most of all after the real business of life has commenced, nervous, excitable people are liable to overtax themselves, and the younger they learn to exercise common-sense the better it will be for them.

The method to be employed in marking must vary in different grades and in different classes. The decimal scale is usually adopted to ensure dispatch, and any plan which does away with complicated marks, which simplifies it, is an improvement. To apply a fair test briefly to each scholar, and then to note how far he has fallen short of correctness, is convenient, and, most important of all, satisfies from its strict justice. It does away with much of the interminable adding and aver-

aging that make life a burden about the time for reports. And anything that diminishes the mechanical work while it does not interfere with it, leaves the teacher more at liberty to refresh himself by study, for marking merely is never going to prove the philosopher's stone to leaden ignorance.

The life-story of a weak, miserly weaver of Raveloe, has been told with a simple directness that is full of pathos; the power of circumstances is strongly portrayed, narrowing his sympathies and hopes till he seems scarcely less a machine than the shuttle he throws. guineas rising in the iron pot satisfy him without suggesting a thought of the comforts they might represent. In the sign he has forgotten the thing signified. Wiser men than Silas Warner have done the same, only instead of a loom and guineas they have had some ingenious project or well-knit theory. It has become to them the one important thing, and the marking system is liable to this abuse of pre-eminence. Just as soon as all a teacher's efforts in the class are directed to finding out what the scholar knows from the text-book, and no verbal instruction is given, he has done an injustice to himself and his class, and has begun the cramping process. While we are complacently congratulating ourselves on our modern improvements, let us see to it that with our object-teaching and diagrams, and marking, to simplify and stimulate, we do not forget the good old-fashioned teaching that furnished healthy brain-work for pedagogue and pupil. X.

A FEW HINTS ON THE STUDY OF HISTORY.

The study of history may be made one of the most dry and barren, or one of the most interesting and fruitful, of all the studies pursued in school. With young children the appetite for stories is very strong. They delight in word-pictures; and for them the scenes from real life should be vividly portrayed. At first, little attention should be paid to the relation of time or of cause and effect. The characters should be drawn in strong colors, and the whole scene brought powerfully before the mind. After such preliminary reading the pupil may begin the formal study of history in school.

Now the preceding desultory style of reading is to be changed. Events are to be studied in an orderly manner, with proper chronological arrangement and philosophical development.

The more important events are to be clearly distinguished. And just at this point there is room for great improvement in some of our

school histories. They narrate too much on a level, the minor parts appearing on the printed page just as prominent as the more important. The outline sketch should be given in larger type, and the substance of it should be thoroughly laid up in memory. This would keep all well connected and orderly. Then this sketch should be filled out with the strong, vivid pictures that would make past times and distant places seem present and real,—such pictures as in childhood riveted the attention and charmed the mind. An author of a History designed for schools should be master of two different styles of writing,—one compact and in form, adapted to mere statement, the other more free and full, and in form of animated description.

So far as the outline study is concerned, important aid may be derived from representations addressed to the eye. A good method, and one much employed, is to draw century-lines, marking off the page into spaces corresponding to centuries, and then to mark in proper places the principal names and events. This will help to impress upon the mind the approximate date. In studying the history of monarchies, it is very useful to run a genealogical table through such chronological lines. Where so much depends upon the genealogy, it should be made, in its main features, thoroughly familiar.

In former days, the student of history spent much time and pains in Subsequently a reaction took place; and now committing dates. many persons scout the idea of committing dates at all. But this is an extreme, and a very unwise one. The most important dates (and those only) should be thoroughly fixed in mind. So, too, in the old days, it was the fashion to commit much to memory. Now, many persons oppose the idea of committing to memory at all. Both extremes are to be avoided. Some few things are so very important that the statement of them should be made with the utmost care and exactly memorized. Knowledge in this definite form is retained longer than ideas loosely conceived or expressed. It is well that the student should recite history in various ways. Let him state the few great events exactly in a given form of words; state others entirely in his own language, by topics or in answer to questions; write others in brief tabular form; write sometimes a full account or description; or practise any other method of expression that experience may show to be useful. Let him avail himself of every collateral aid, such as progressive maps, which every school history should furnish.

Let him especially bear in mind that the right study of history is not confined to isolated facts and dates, or the record of great wars and the biography of kings. It deals with the daily lives of the people, their condition and progress in freedom, education, religion, laws, customs, and civilization. It teaches us by what course the institutions that we now enjoy have been developed in successive generations, and thus fits us for the duties of good citizenship in the present time. Thus pursued, the study of history becomes noble and elevating, giving us a wide knowledge of the experience of others in the past, and enabling us to make this good and orderly knowledge available for our own guidance in the future.

C. S. H.

ABRIDGMENT OF ELEMENTARY WORK IN LATIN AND GREEK.

[Concluded.]

A SECOND method by which more time is gained for the study of natural science in the schools preparatory to college is, by beginning Latin and Greek earlier in the general course of study, or what is equivalent, extending the time of the preparatory course. Several of the best academies in New England have recently added a year to their courses of study for this purpose. Philips Exeter Academy accordingly gives five years of Latin study and three of Greek, where it used to prescribe four and two years for each respectively; Philips Andover Academy lengthens from three, and three and one half years, to four years, and many schools, both private and public, require the thorough completion of a course of study, which a few brilliant students complete in three years, but for which the majority require one or two years additional.

The tendency of the times is not to an abridgment of Latin and Greek work when it is pursued at all thoroughly, but to such a distribution of it as shall allow more time for scientific studies. Even in Vermont, school committees are seriously considering the expediency of beginning classical studies in the grammar schools, that the high school may have more time for English work. A further reason for this appears in the necessity of a knowledge of the classics in order to the most successful prosecution of scientific studies. Something may be done with the elements of botany and physics without the preliminary Latin or Greek; but systematic botany is not thoroughly mastered and applied by those unacquainted with the nomenclature and classification accepted by scientists. Indeed, this nomenclature has a meaning and force to a classical student which another has neither power nor imagination to comprehend.

We do not intend to be understood as affirming that no abridgmen

of work in Latin and Greek is possible. We believe that many teachers accomplish less than two thirds what they might, in the first year's tuition of classes in these ancient tongues. But time is not gained by rushing over the grammar faster than the forms can be permanently fixed in the memory. Hence our own practice is to give brief lessons in Latin and Greek Grammar, and with each such lesson provide for oral and written translation into English, and then from English into the ancient tongue; and if both Greek and Latin are pursued at the same time, to translate from each of these languages into the other. Thus the vocabulary is rapidly acquired, and the student is certain of the forms as far as he goes. Unite with such a course the careful tracing of English derivations from classic stems, proper discrimination as to shades of meaning of words, the study of mythology, geography, history, and antiquities, and in six months, if only the etymology and first principles of syntax are completed, the benefits of linguistic study will be clearly apprehended by the student; and if there exists any capacity for it, a genuine love for such study will result and become the spur to future excellence.

F.

RESIDENT EDITOR'S DEPARTMENT.

WE are happy to announce to our readers that an arrangement has been made with a responsible party, by which, instead of four ill-supported State journals of education, we are to have one New England Journal, with the good-will of the American Institute of Instruction, and all the several State associations. With such a subscription list as this must give, and the greatly increased advantages to advertisers, it will enable the publisher to give that personal attention to it which has been impossible under the former arrangements.

In congratulating ourselves, however, upon this consolidation of our journals, we are not willing to abate one iota from our estimate of the value of the work done by the journals which are now to be merged into one.

They have done a work which could not have been done so well, we believe, by any other agency. Thirty years ago nearly all our educational meetings were conducted chiefly by clergymen; and very few of our teachers, especially public school teachers, ever wrote an article for publication.

When the "Massachusetts Teacher" was established, and we presume it was so with those of the other States, the twelve editors responsible for the several numbers not only furnished articles themselves, but obtained assistance probably from five times their number of the teachers of the State. Now when we take into account the reading necessary in the preparation of those articles, and the facility which many acquired in composition, we shall not be inclined to undervalue the benefits derived from their journal by members of this profession.

Having served as a monthly editor for two years, in the early days of the "Massachusetts Teacher," and for the same length of time as the resident editor, we feel a personal interest in its reputation, not, however, so much for what we have done for it as for what it has done for us. If it contains no well-digested system of pedagogy, its pages will furnish much material that will be found valuable in the preparation of such a system, if it is ever made.

So much for the past of our State journals. In the wider sphere and increased prosperity and usefulness of the "New England Journal," we shall see a constantly renewed evidence of the good they have accomplished, and rejoice that in fulness of time we were able to take this new departure.

And now the most important thing in connection with it is, that it shall receive the cordial support of the teachers of New England. A first-class journal can be made only on the condition of such support.

"Not every one that saith, etc., but he that doeth," — and the best thing every teacher can do is to become a paying subscriber.

PERSONAL.

WE received a few days since a call from Father F. J. De Christo, of Rio Janeiro, who has been in Europe and in this country, giving special attention to educational systems. This gentleman is director of an institution in Rio Janeiro, and being desirous of improving the methods of instruction in Brazil, is making a study of the educational systems in the countries he has visited.

We visited some of our primary and grammar schools with him, and he expressed himself as very much pleased with our methods of instruction and discipline.

The primary schools, especially, gave him much pleasure; and he leaves for home with the intention of reducing primary instruction there to a system as near as possible like ours. Father De Christo would have been glad to take with him a young lady of experience in our primary schools, and acquainted with the Portuguese language, at a good salary. He proposes to visit this country again in 1876, and should he find a few teachers at that time possessing the requisite qualifications, we have no doubt he would offer inducements to spend a few years in Brazil, which would meet a favorable consideration.

We found him to be a very intelligent gentleman, and have no doubt from his ready appreciation of the best in our schools, that he is an excellent teacher.

ANNUAL MEETING OF THE MASSACHUSETTS TEACHERS' ASSOCIATION.

THE thirtieth annual meeting of the Massachusetts Teachers' Association will be held in the High School Building, Walnut Street, Worcester, December 28, 29, and 30, 1874.

Teachers, superintendents, school committees, and all friends of education throughout the State, are cordially invited to attend this meeting and to unite heartily in making it both interesting and profitable. The city of Worcester is accessible from all parts of the State, and its educational atmosphere is conducive to vigorous thought. The time of holding the meeting is favorable as most of the schools are in vacation, and the teachers are free to enjoy this "feast of reason and flow of soul." It is generally understood that in towns whose schools are in session, the committee will readily dismiss the schools if the teachers wish to attend the meeting.

The day sessions will be devoted to the discussion of practical questions of vital importance to the interests of popular education. Persons have been invited to introduce these questions, and it is hoped that every teacher will come prepared to take part in the discussions.

MONDAY, DEC. 28.

At 4.30 P. M., the Directors will hold a meeting in the Library.

At 7 o'clock, the Association will meet in the hall for the opening exercises.

At 7.30, a lecture will be given by Rev. Phillips Brooks, of Boston.

TUESDAY MORNING.

At 9 o'clock, business meeting.

9.30: Discussion, — "Representation of Teachers on School Committees." Introduced by Samuel Eliot, LL. D., of Boston.

10.40: Discussion, introduced by George H. Martin, of Bridgewater, — "Is the memory so trained in our schools as to involve the neglect of the other faculties?"

TUESDAY AFTERNOON.

HIGH SCHOOL SECTION, SAMUEL ELIOT, LL. D., Boston, President.

2 o'clock: Discussion, introduced by Dr. Putnam, of Boston, — "The Physical Training of Girls."

3.15: Discussion, introduced by Mr. Peterson, Principal of the Worcester High School, — "What are the proper qualifications for admission to the High School?"

GRAMMAR SCHOOL SECTION, L. F. WARREN, West Newton, President.

2 o'clock: Discussion, introduced by E. A. Hubbard, Superintendent of Schools in Fitchburg, — "To what extent should pupils be required to explain their work in Arithmetic?"

3.15: Discussion, introduced by W. E. Eaton, of Charlestown, — "How much technical Grammar should be taught in the Grammar School?"

PRIMARY SCHOOL SECTION, A. P. STONE, Springfield, President.

2 o'clock: Discussion, opened by Miss Mary A. Kneil, Principal of the Training School, Springfield, — "Arithmetic in Primary Schools, the amount and kind of work to be done."

3 o'clock: Discussion, — "Truthfulness. How shall correct habits in this respect be cultivated and secured among young children?"

4 o'clock: Discussion, — "Spelling in Primary Schools, with special reference to the kind of words to be spelled, and the method of conducting the exercises."

TUESDAY EVENING.

7.30 o'clock: Lecture on "Massachusetts School Legislation," by Hon. Joseph White, Ll. D., Secretary of Massachusetts Board of Education.

WEDNESDAY MORNING.

At 9 o'clock, business meeting.

9.30: Discussion, opened by A. P. Marble, Superintendent of Schools in Worcester, — "What Legislation is necessary to enforce attendance at school?"

10.30: A practical lecture designed "to show by a class of pupils how freedom of movement and beauty of style in Penmanship can be secured in our common schools," by. Prof. H. C. Kendall, of Boston.

11.15 o'clock: Discussion, — "What are the proper qualifications for admission to the High School?"

FREE RETURN TICKETS will be furnished to all members of the Association who come to the meeting over the following railroads and their branches, namely, Boston and Albany; Old Colony; Boston and Providence; Boston, Lowell and Nashua; Eastern; Boston and Maine; Fitchburg; Boston, Hartford and Erie; Boston, Clinton and Fitchburg; Framingham and Lowell; Fitchburg and Worcester; Norwich and Worcester; Providence and Worcester; Boston, Barre and Gardner; Worcester and Nashua; Connecticut River; New London; Northern; New Bedford; Vermont and Massachusetts; Ware River; Cape Cod. Winchendon teachers desiring to go to the Convention by way of Fitchburg, can obtain tickets of Cheshire agent, good for passage to Fitchburg and return, at half price, and return tickets to Fitchburg can be obtained at the Convention.

Return tickets may be had upon application to E. B. Young, Corresponding Secretary.

Board can be obtained at the Bay State House, Main Street, at \$3 a day; at the Lincoln House, Elm Street; Waverly House, Front Street; Exchange House, Main Street; Waldo House, Waldo Street, at \$2 a day.

ALBERT G. BOYDEN, President, Bridgewater.

ALFRED BUNKER, Secretary.

Boston Highlands, Nov. 1874.

Trains leave Boston for Worcester on Boston and Albany Road at 5, 7, 8.30, 10, 11, A. M.; 1.30, 3, 4.30, 5, 5.30, P. M. Return 7, 8.30, 9.25, 9.45, A. M.; 1.40, 3.25, 4.25, 4.30, 6, 9.55, P. M.

PLYMOUTH COUNTY TEACHERS' ASSOCIATION.

ONE of the pleasantest, most instructive, and in every sense enjoyable meetings of the Association was held in Kingston, Oct. 16 and 17. Surely the people of Kingston must have studied the art of hospitality, and also possess a natural aptitude in that direction.

The exercises were held in the Baptist Church, and consisted of the following papers and debates: —

"Special Preparation by the Teachers," paper by A. G. Boyden. As Mr. Boyden was necessarily in attendance at Cohasset, the paper was read by Miss Woodward.

"Teaching Drawing," by Miss Eliza B. Woodward, of Bridgewater Normal School.

Lecture by Rev. H. N. Hudson, of Cambridge, the eminent Shakespearean editor and critic, on the ways and means of cultivating a proper taste in reading. His method epitomized is only two or three of the best classical authors, but a great deal of them. The lecture elicited many questions which were very kindly and instructively answered by the lecturer.

Paper—"Influence of Parents on Schools," by Rev. John Thomson, of South Abington. The evidence of those who followed seemed to point to a rather general indifference on the part of parents in regard to the behavior and real progress of their children in the schools. "Ye committee man" came in for much blame on the part of some, but was ably vindicated, especially by Mr. Thomson, who knew whereof he spoke.

The paper on "Arithmetic," by J. G. Knight, of North Abington, was followed by a discussion, or rather a sort of dialogue, which was finally ended by the time for closing.

Friday evening was spent in listening to a reading by Moses T. Brown, of Tufts College.

SATURDAY'S EXERCISES.

Discussion opened in the affirmative by C. W. Wood, Sup't Public Schools, Brockton—"Should text-books be furnished pupils at the public expense?" Most of the speakers who followed doubted its expediency, but Mr. Fullarton, of Woburn, favored it from actual experience of its workings.

Lecture — "What a scholar ought to Remember, what he ought to Forget, and what he ought never to have Learned," by H. F. Harrington, Sup't Public Schools, New Bedford; worthy of the speaker and "just like him." Followed by remarks in the same vein by Mr. Littlefield, Master of the Prescott School, Charlestown.

Lecture—"Teaching Language," by W. E. Eaton, Principal Harvard School, Charlestown, which was well received, was followed by a discussion, which some regretted to have closed by the call to dinner.

Paper — "Something about Primary Schools," by Miss Mary B. White, Principal of New Bedford Training School.

An impromptu on the "Marking System" followed, in which the system found but little favor.

The usual resolutions were adopted.

OFFICERS FOR THE FOLLOWING YEAR.

President - H. G. Goodrich, of Hingham.

Vice-President — C. E. Ridler, of Kingston, W. T. Copeland, of Brockton, A. H. Cornish, of Plymouth.

Secretary and Treasurer - J. G. Knight, of North Abington.

Executive Committee—A. G. Boyden, of Bridgewater, W. C. Fickett, of East Bridgewater, J. W. McDonald, of South Abington.

NEW YORK STATE NORMAL TEACHERS' ASSOCIATION.

THE New York State Normal Teachers' Association held their annual meeting for 1874 at Westfield, Mass.

Eight normal principals were present. The sessions continued for three days, and among the questions discussed was one pertaining to the use or

text-books in school; one concerning a five years' course of study for common schools, and one concerning methods of teaching in the normal schools.

The questions were ably discussed, and some valuable knowledge to the normal teacher obtained. The Association expressed themselves to be much pleased with the Westfield Normal School, and with Westfield. The Association adjourned to meet in May next, at Potsdam, New York.

DECEMBER.

THE snow lies on the frozen ground, And, glittering in its beauty pale, It covers hill, it covers dale,— It mantles everything around.

It decks the tops of leafless trees,
And silvers sweetly in the light;
It whitens in the starry night,
And gently follows on the breeze.

The icy King has left his hall,
And, sprinkling from his bounteous hand
His crystal offerings o'er the land,
They glisten everywhere they fall.

The ground is hard and wintry white; The creaking wheels go slowly by, Like aching hearts that live to sigh, And sighing, live from morn till night.

Across the road and down the lane Ring happy voices sounding near, Midst tinkling bells that greet the ear, Whilst echo catches up the strain.

December fills the frosty air,
And follows on the chill night wind; —
Its finger-tracing do we find
O'er hill and dale and everywhere.

And such is life; — our lots are cast
Midst hopes and joys, through smiles and tears,
'Neath changeful skies, perhaps for years,
Till bleak December comes at last.

M. G. A. T.

MEETING OF SUPERINTENDENTS.

THE New England Association of School Superintendents held its semiannual meeting in the City Hall, Boston, on Friday, Nov. 20.

The attendance was unusually large, and the topics discussed elicited much interest. These meetings are conducted with the least formality possible, which gives them the peculiar interest of an animated conversation. One essay was read by Prof. Tweed on "Principles and Methods," which gave rise, not so much to a discussion as to an amplification of the ideas advanced in the paper.

Another topic discussed was that of "Written Examinations." Considerable difference of opinion existed as to the value of these examinations as tests for promotion, though frequent written recitations were approved by all. In the afternoon, the discussion was mainly upon "Programmes of Study." It seemed to be admitted that our programme at present is not satisfactory, either with reference to the time given to the various studies, or to the extent to which the studies shall be carried in the several grades. Perhaps the greatest difficulty in arranging a programme for our grammar schools arises from the different interests to be consulted.

The leading object seems usually to be to prepare pupils for the high school, and the character of a grammar school is supposed to be shown by the number and standing of pupils who enter the high school. But only a small per cent of those who enter the grammar school ever reach even the second class, and of those who complete the grammar-school course, a large portion never enter the high school.

It seems necessary, therefore, that the programme should have a certain practical completeness: 1st, for those who fall out by the way; 2d, for those who take only the grammar-school course, and then should furnish a suitable preparatory course for those who enter the high school. Whoever can reconcile those various and often conflicting interests in a grammar-school programme will render a service which has not yet been done. The discussion of this topic showed that it is a problem upon which nearly every superintendent is earnestly engaged.

The meeting was, upon the whole, one of the most interesting and profitable we have ever attended.

This being the first meeting of the Association since the resignation of Hon. J. D. Philbrick as Superintendent of Schools in Boston, the following resolutions, introduced by A. P. Marble, Esq., of Worcester, were unanimously adopted:—

Resolved, That we have noticed with regret the resignation of our associate, Hon. John D. Philbrick, Superintendent of Schools, Boston. For more than thirty years he has been prominent as an educator; upon every grade of school in New England he has impressed his influence; this extended experience and a wide field of observation have rendered him an authority on this subject of public schools; and his name throughout the world is indissolubly linked with common-school education.

Resolved, That this capacity for judicious, discriminating work — so much needed where empiricism is so rife and so disastrous — should not be lost; and we confidently anticipate seeing him, when his health is restored, so long as life remains, occupying those eminent positions for which his ability and the experience of his life have so admirably fitted him.

"THE NATIONAL TEACHERS' ASSOCIATION."

THE doings of the National Teachers' Association at Detroit have been published in a volume similar to those of preceding years, but larger, and may be obtained of the Secretary, A. P. Marble, of Worcester. The volume contains the lectures, with a very full report of the debates to which they gave rise, and all the proceedings of the Association of interest to educators.

We feel sure that every teacher who was present at the meeting of the Association will place a copy of the proceedings in his library; and for those who were not there, it ought to be enough to say that nearly all the great questions of educational interest were very fully and ably discussed. It is the most valuable contribution to our pedagogical literature made during the year. Indeed, it is a summary of the most advanced thought in educational matters. Buy it.

"SCHOOL SCIENTIFIC SOCIETIES."

LENOX, MASS., Nov. 15, 1874.

DEAR SIR: — The idea suggested in the November number of your paper, by L. F. Pourtalès, seems to me to be important and timely. So forcibly have the advantages of a system of "School Scientific Societies" impressed themselves upon my mind since reading the above-mentioned article that I have at once adopted the plan in the Lenox High School, which is under my charge. Our organization consists at present of about twenty members, and it is proposed as an experiment to devote the last hour of every alternate Friday afternoon to a meeting to be held in the school-room in the hearing of the whole school. It is thought that this may arouse a wider interest in the subjects to be studied.

A special department is chosen by or for each member, and it is expected that at each meeting each member, or each alternate member, of the society will read a report of the observations made during the preceding fortnight.

As illustrative of our work: One member has it for his duty to note the times of snowfalls, and the depth in inches of each fall; another notes the direction and velocity of the winds; another the indications of the thermometer; and another the shapes of snow crystals, illustrated by drawings and accompanied by a report of the state of the thermometer at the time of making the observation. We feel confident that we shall be repaid for our pains, even if we have to depend entirely upon ourselves, in the habits of careful obser-

vation and study we must acquire, and in the knowledge of natural phenomena which must be gained.

If, however, other schools shall adopt Mr. Pourtalès' suggestions, and shall form similar societies, we feel that, by correspondence and mutual interchange of data and specimens, the advantages of the proposed system will be more than doubled.

We shall of course vary our objects of research as the varying seasons suggest.

We have adopted as a temporary name, "LENOX HIGH SCHOOL SCIENTIFIC SOCIETY"; but if other societies shall be formed, we shall wish to correspond with them in regard to choosing a *general name*, which may apply to all, and be permanent; and also with regard to preparing a common constitution.

Hoping to hear soon from other schools,

I am yours, respectfully,

HARLAN H. BALLARD,

Principal of Lenox High School.

To Editor "MASSACHUSETTS TEACHER,"

THE "New York Tribune," commenting on the fact that the teachers of that city do not receive the social recognition to which they are entitled, says:—

"This disesteem which seriously harms the profession, and, reacting through the school system, those also who feel it has its actual foundation in money. First, if least important, among its causes is the characteristic American liking for that comfortable possession, and equally characteristic disregard of the people who have none. Then comes in the question of cultivation. With little or no prospect of advancement in the profession, and with starvation salaries in almost every branch of it, there are great numbers of teachers who are not brave enough and not strong enough to endure the strain of reaching a fine and graceful culture.

"They cannot rightfully be blamed for this, — they are permitted to fight only for daily bread and a few clothes; — but what leisure or what incentive have they for the winning of more? Speaking in the gentlest way, it must be said that teaching in this country is the subject of the most short-sighted injustice. It is outrageous that a profession, which in its noble and imperative work touches the mark with theology and medicine, should give to its cleverest members little more than the poor necessities of life; should offer them no hope of an old age made comfortable by the work of their prime. It is the absolute truth that the salaries paid to public school teachers are as small as in any sort of human decency can be given. Public money is spent lavishly on many a popular folly, — we are generous in building magnificent school-houses, but when changes are made in the starveling salaries of teachers, they are often in a downward direction.

"One consequence is that men of lively and original mind who happen to

1874.]

step into the profession use it merely as one round of life's ladder, and climb out of it as soon as possible. Of those who stay in it, many a one beginning with good natural aptitude is shaped in the struggle with constant hard times into the prejudiced and thoroughly conservative pedagogue who is not the least bane of our school system. Without much leisure to use the means of intellectual expansion, and without money to purchase them, he becomes a teacher by rote; his poverty first, and then his will, consents to a routine without freshness and inspiration. The faults of our system are many and grievous, as an almost unanimous complaint attests; and half of these faults are directly traceable to the positive ignorance and indifference of teachers.

"Instead of severely censuring them, however, it might be as well to distribute the blame, not leaving out niggardly and thoughtless school boards and committees. We have no possible commendation for incompetent teachers, but it must be said that they give as much as their salaries rightly call for. In advocating worthier remuneration we do not mean to offer premiums to incompetency. We want better teachers; a larger and more rigid preparation for the profession; higher standards of admission; and, best of all, the enthusiastic devotion of proficients. We urge that salaries should be large enough to invite men and women of proper capacities to the work; and that the requirements should be so severe as to exclude all incapables. When these needs are met, the *morale* of the profession will instantly rise, and the profession itself will take its own deserved place in social esteem.

COMPLIMENT TO AN AMERICAN ELOCUTIONIST.—We notice that the "Sixth Reader" of a series recently published in London called the "Royal Readers," contains an elocutionary introduction by Prof. Lewis B. Monroe, Dean of the Boston University School of Oratory.

BOOK'S.

MANUAL OF MYTHOLOGY; Greek and Roman, Norse and Old German, Hindoo and Egyptian Mythology. By Alexander S. Murray. With fortyfive Plates. Published by Scribner, Armstrong & Co.

This truly elegant book should find a place in the library of every student, and of every one who wishes to understand the constantly-recurring allusions in our best literature. The myths, like the languages of the various Aryan nations, all have a family resemblance, making a common origin; and in the Veda, the earliest record of the Sanskrit language, many of the myths common to these nations are presented in their simplest form.

There is something intensely interesting in the study of the myths of a nation. They are the germs of national characteristics. They constitute, in fact, the religious history of a nation. The form, indeed, may be and is outgrown, but the elements of truth contained in them reappear in a more rational spiritualism.

Even the old forms are retained in the literature of nations, and the purpose which they serve of illustration and ornament furnishes the best evidence that they contained the germs of many of the highest truths. Until science stops us short at "matter" and "force," and forbids us to look back of them for intelligence, we can never cease to be of interest as indicating primitive religious ideas; and even then they must keep their place in poetry. To those who have examined the first edition, it is only necessary to say that the author has made large additions, which render it worthy to take rank as a standard text-book. The illustrations are beautiful.

THE EXHIBITION DRAMA; For Private
Theatricals, Home Representations,
Holiday and School Exhibitions. By
G. M. Baker. Published by Lee &
Shepard.

Mr. Baker's work in this department is too well known to require more than a simple announcement of this book. Those who have used the previous volumes of the series will not fail to use this.

THE AMERICAN SCHOOL MUSIC READER.
A Systematically Graded Course of Instruction in Music for Public Schools.
First, Second, and Third Books. By
L. O. Emerson and W. S. Tilden.
Published by Oliver Ditson.

The First Book is adapted to the three years' course in the primary school, the Second and Third Books to grammar and high schools. The exercises seem to be well graded, and interspersed with pleasant airs, which will make the series a favorite with pupils. By the use of these and similar books in the public schools of the State, pupils will acquire about the same facility in reading music as in reading language.

THE SONG FOUNTAIN. A Vocal Music Book for School and Family Use. By Wm. Tillingham and D. P. Horton. Published by J. W. Schermerhorn.

This is intended for classes in our grammar and high schools to "give readiness in singing at sight, a proper vocal development, and a tasteful and appropriate style in musical performance." It is enough to say that it is well adapted to secure these results.

THE ELEMENTS OF PHYSICS. A Text-Book for Academies and Common Schools. By Sidney A. Norton. Published by Wilson, Hinkle & Co.

